

ABSTRACT

A thin film type ND filter being inexpensive and excelling in durability. There is provided ND filter (0) comprising transparent substrate (1) and, superimposed thereon, light absorption films (3,5) and dielectric films (2,4,6), wherein the light absorption films 3.5 consist of a composition comprising 1 to 30 wt.% of a metal in pure form and 50 wt.% or more of a saturated oxide of the metal with the balance of compounds of the metal containing lower oxides of the metal. Metal raw material of the light absorption films (3,5) is selected from among Ti, Cr, Ni, NiCr, NiFe and NiTi. As for the dielectric films (2,4,6), SiO₂ or Al₂O₃ is used. Function of reflection prevention is imparted by superimposing the light absorption films (3,5) and dielectric films (2,4,6) in predetermined film thicknesses and in predetermined sequence. Alternatively, a reflection prevention layer may be formed on the back of the substrate (1).